



## Revitalizing the Golden Fiber: Marketing Strategies and Economic Opportunities in Bangladesh's Jute Industry

Sabia Khan Aurora<sup>1\*</sup>, Sarder Ali Haider<sup>2</sup>

Bangladesh University of Professionals

**Corresponding Author:** Sabia Khan Aurora [sabiaaurora15@gmail.com](mailto:sabiaaurora15@gmail.com)

---

### ARTICLE INFO

*Keywords:* Jute Industry, Bangladesh's Economic Development, Global Sustainability, Marketing Strategies

*Received :* 4 March

*Revised :* 22 April

*Accepted :* 22 May

©2024 Aurora, Haider: This is an open-access article distributed under the terms of the [Creative Commons Attribution 4.0 International](https://creativecommons.org/licenses/by/4.0/)



### ABSTRACT

This research seeks to shed light on the resurgence of the jute industry in Bangladesh, emphasizing its potential as a pivotal driver of the nation's economic development and its alignment with global sustainability objectives. The study further aims to map out the sector's marketing strategies, both in domestic and global contexts. Utilizing qualitative method, this research is based on the collection of primary data from interview with key industry stakeholders and observing the key points. Advanced analytical tools, including ATLAS.ti 2023, were employed to facilitate thematic and conceptual analyses, drawing connections between historical industry developments, current strategies, and future trajectories. The study delves into the prospect of Jute revitalisation and unearths the utilisation of key concepts of SWOT analysis and Ansoff matrix for the research purpose. Key findings include determining strength, weakness, opportunities, threats of the jute industry as well as strategies for value addition such as market development, market penetration, product development and diversification strategy and how to link all the concepts with practical implication

## INTRODUCTION

Jute, colloquially termed the "Golden Fiber", is emblematic of Bangladesh's rich cultural and economic heritage, resonating deeply with the nation's identity (Mozid et al, 2020). Of its two distinct varieties, White jute: *Corchorus capsularis* L. and Tossa jute: *C. olitorius* L., both have left indelible marks on the nation's agrarian and industrial landscapes (Kamarudin et al, 2022). Following the crucial partition of Bengal in 1947, the territory that is now known as East Pakistan and later as Bangladesh became the world leader in producing raw jute. But the road to freedom after 1971 was not without its share of hardships. Significant challenges were encountered due to falling worldwide demand, ineffective internal administration, and the rising threat from synthetic fibres (Sayeed et al, 2019). But the contemporary period is a model of a revitalized jute industry that triumphs against hardship. The revival can be attributed to a combination of factors, including increased environmental consciousness on a worldwide scale, forward-thinking government initiatives in Bangladesh, and groundbreaking scientific achievements, such as the jute genome decoding (Islam et al, 2022).

As we embark on this exploration, the discourse intends to delineate the multifaceted role of jute, not merely as an economic fulcrum for Bangladesh but also as a symbol of its legacy and prospective future (Islam & Hussain, 2022). Through this article, we endeavour to provide a comprehensive panorama of jute's economic significance, chronicle its marketing strategies, and envision its pivotal role in charting Bangladesh's trajectory.

### 1. Problem Statement

A substantial information gap has been established due to the lack of a thorough and high-quality SWOT analysis of the jute business in Bangladesh, which makes it difficult to make educated decisions and plan strategically (Mim et al, 2021). All parties involved, including policymakers and businessmen, need a solid grasp of the jute industry's SWOT (strengths, weaknesses, opportunities, and threats) to navigate its complexities (Chakrabarty,2021). A thorough understanding of the internal dynamics and external environment of the industry is crucial for wisely utilizing the Product-Market Expansion Grid, which becomes even more difficult to implement due to this lack of knowledge. Furthermore, there is a noticeable lack of current research and studies devoted to the revival of the "Golden Fiber," even though the jute sector is historically and socioeconomically significant (Dubey et al, 2021). Unlocking the full economic potential of Bangladesh's jute sector is hindered by the lack of current and thorough analysis, which makes it difficult to develop targeted strategies for the industry's revival. It is critical to fill this knowledge gap in order to develop long-term strategies and policies that will help the jute industry recover and become more prominent on a worldwide scale.

## 2. *Aim, Objective, and Research Questions*

This study aims to clarify the nuances surrounding the jute industry in Bangladesh, highlighting the sector's potential to boost the country's economy and make a substantial contribution to global sustainability. Beyond its status as a commodity, jute, often known historically as the "Golden Fiber," has profound socio-economic implications for Bangladesh. This study is designed to provide a comprehensive understanding of the sector by considering modern marketing techniques, value addition, and diversification opportunities.

### *General Objective*

To explore the jute industry's resurgence in Bangladesh's economy, including its impact on national development and global sustainability benchmarks from a marketing perspective.

### *Specific Objective*

- To discern the socioeconomic impact of Jute industry in the growth of Bangladesh economy.
- To discover arenas to explore for expanding export market of Jute industry of Bangladesh.
- To determine effective marketing strategies to revitalise the glory of Jute as "Golden Fibre" and market leader in the industry.

Considering the aforementioned research problem, aim and objectives, the study refines three research questions:

RQ1. In what ways does the jute industry significantly impact the socioeconomic fabric of Bangladesh, specifically in its diverse areas of development?

RQ2. How might jute and its related products expand Bangladesh's export market, specifically via avenues of product diversification and value addition?

RQ3. Which strategic marketing blueprints stand efficacious in enshrining Bangladesh's eminence as a frontrunner and path-breaker in the jute sector?

The paper is organized as follows. Sections 2 and 3 present the literature review and methodology, respectively. The results, implications and conceptual models are given in Sections 4 and 5, respectively. Section 6 presents conclusion with recommendations, limitations, and future research directions.

## **LITERATURE REVIEW**

### *Historical Background and Significance of Jute*

Jute, often regarded as the "Golden Fibre," has embedded itself deeply within the socio-economic fabric of Bangladesh, tracing its roots back to the pre-independence era. Throughout the British colonial rule in India, the Bengal region leaned heavily on jute as a primary agricultural resource, shaping its economic landscape (Islam et al, 2017). The establishment of the first jute mill during the Pakistan era cemented its significance; however, post-independence nationalization of mills began a downturn in its prominence leading to the declining popularity of Jute industry and jute products.

### *Socio-Economic Implications and Farmer Interdependence*

Bangladeshi farmers' lives are intertwined with the jute business (Akter et al, 2020), which has far-reaching socioeconomic consequences. For many communities, growing jute is more than simply a job; it's an integral part of their history and culture (Islam et al, 2019). Beyond the obvious monetary effects, the industry is critical to rural revitalization, new job creation, and the maintenance of time-honoured customs. Producing this "Golden Fiber" boosts local economies and strengthens social networks, demonstrating the inseparable relationship between farmers and the jute industry. In turn, farmers play a crucial role as both suppliers and important members of the economic and cultural fabric; their financial well-being is highly dependent on the jute industry's longevity and success (Jahan et al, 2019).

### *Economic Challenges and Opportunities*

There is a wide range of economic possibilities and threats that the jute sector in Bangladesh must contend with (Akter et al., 2020). Farmers continue to face the difficulty of securing regular incomes due to the constant challenge of fluctuating jute prices. Outdated processing facilities and transportation limits are examples of inadequate infrastructure that reduce the industry's overall efficiency. Nevertheless, these difficulties also present chances for development and renewal (Shahinur et al, 2022). Market expansion and boosting export earnings are both made possible by innovations in product diversity and the creation of environmentally sustainable jute-based goods (Dubey,2020). The government's assistance and strategic infrastructure improvements could help Bangladesh's versatile "Golden Fiber" overcome obstacles and tap into economic potential. At this stage, the industry must decide whether to succumb to economic pressures or to forge ahead into a prosperous future.

### *Global Demand and Product Diversification*

The worldwide appetite for jute has seen a dip, primarily attributed to synthetic fibre competition and enhanced bulk handling equipment. This decrease was particularly pronounced in developed nations (Niloy, 2021). However, with rising costs of alternatives like polypropylene, the scale might tip in jute's favour. Beyond traditional uses, jute is branching out into various sectors, with innovations like the biodegradable 'Sonali Bag' and its usage in organic green tea cultivation exemplifying its potential. (Rahman, 2022)

### *State of the Jute Industry*

The jute industry, with its historical roots, socio-economic implications, and innovative prospects, remains a pivotal sector for Bangladesh. While it grapples with economic challenges and traditional practices, there's undeniable potential for product diversification, global demand resurgence, and sustainable technological advancements through adoption of appropriate marketing strategies (Saikia, 2020).

The synthesis of the existing literature underscores the importance of re-evaluating strategies, harnessing innovation, and optimizing traditional practices to elevate the jute industry to new heights. The subsequent sections of this research will delve deeper into understanding these dynamics and crafting actionable insights.

## METHODOLOGY

### *Research Type*

This study is characterized by a qualitative approach. Qualitative research involves using a combination of interview and observation methodologies to obtain data. Semi structured interviews were taken of three tiered respondents including policy makers and external stakeholders, owners of private jute mill, and local farmers. During conducting interviews, the authors diligently adhered to established ethical guidelines, ensuring the utmost respect for the confidentiality of the respondents. Participants were provided with the freedom to discontinue their involvement in the study at any given point. In addition, the authors expressed a sense of concern regarding the potential influence of the interviewees on the intervention being studied.

### *Sampling Process*

The study followed convenient and purposive sampling. Getting hold of policymakers and industrialists were quite difficult yet achievable. 5 of each type of respondents were chosen for better sampling and interviews were conducted. This included 5 of the policymakers and external stakeholder, 5 of private jute mill owners and 5 of the local people and farmers. As per their request, the identities and details have not been revealed of the respondents.

### *Sample Size*

The respondents have been classified into three tiers according to the hierarchy. External stakeholders and policymakers have been identified as *upper-level respondents*, the private jute mill owners have been classified as *mid-level respondents*, and the local people and farmers have been classified as *local level respondents*. In total, 15 respondents have been chosen and each have been asked questions according to their relevance to the study.

### *Data Collection*

Primary data were collected from April 2023 till September 2023 through semi structured interviews. The evaluations were conducted in person. The interviews were recorded with the consent of the participants, and to verify the accuracy of the information, the interviewees listened to the recordings at the end of the interviews. Following this, the data from the interviews was transcribed into a manuscript. The authors analysed the manuscript and procured qualitative analysis.

### *Data Analysis*

The interview information was organized and coded into similar groups. The questions of the *upper, mid, and local respondents* were separately coded.

The frequencies and density of the codes and questions were reported. The content was carefully analysed to draw key concepts resulting in thematic analysis. Finally, qualitative data analysis software helped to analyse content, concepts, code co-occurrence, network, opinion mining, and thematic analysis.

## RESULTS

### *Demographics of the Respondents*

Table shows the demographic overview of the respondents. Most of the respondents have completed their higher studies and fall under the age group of more than 45 years old being mostly male. The business background is dominant in the demographics.

Table 1. Demographics of the Respondents

| Variables                                   | Upper-level respondent |                      | Mid-level respondent    | Local level respondent |                |
|---|------------------------|----------------------|-------------------------|------------------------|----------------|
|   | Policy maker           | External Stakeholder | Private Jute mill owner | Farmer                 | Local resident |
| <b>Gender</b>                               |                        |                      |                         |                        |                |
| Male  | 3                      | 1                    | 5                       | 2                      | 2              |
| Female                                      | 1                      |                      |                         |                        | 1              |
| Total                                       | 4                      | 1                    | 5                       | 2                      | 3              |
| <b>Age</b>                                  |                        |                      |                         |                        |                |
| More than 45                                | 2                      | 1                    | 4                       | 2                      |                |
| 45-30                                       | 2                      |                      | 1                       |                        | 2              |
| 30-20                                       |                        |                      |                         |                        | 1              |
| Total                                       | 4                      | 1                    | 5                       | 2                      | 3              |
| <b>Education</b>                            |                        |                      |                         |                        |                |
| Masters and above                           | 4                      | 1                    | 4                       |                        |                |
| Bachelors                                   |                        |                      | 1                       |                        | 1              |
| HSC and equivalent                          |                        |                      |                         | 2                      | 2              |
| Total                                       | 4                      | 1                    | 5                       | 2                      | 3              |
| <b>Profession</b>                           |                        |                      |                         |                        |                |
| Business                                    |                        | 1                    | 5                       | 2                      | 1              |
| Service                                     | 4                      |                      |                         |                        | 2              |
| Total                                       | 4                      | 1                    | 5                       | 2                      | 3              |
| <b>Years of Experience in Jute Industry</b> |                        |                      |                         |                        |                |
| More than 20 years                          | 3                      |                      | 3                       | 1                      |                |
| 20-15                                       | 1                      | 1                    | 2                       |                        | 1              |
| 15-10                                       |                        |                      |                         | 1                      |                |
| 10-5  |                        |                      |                         |                        | 1              |
| 5 or less                                   |                        |                      |                         |                        | 1              |
| Total                                       | 4                      | 1                    | 5                       | 2                      | 3              |



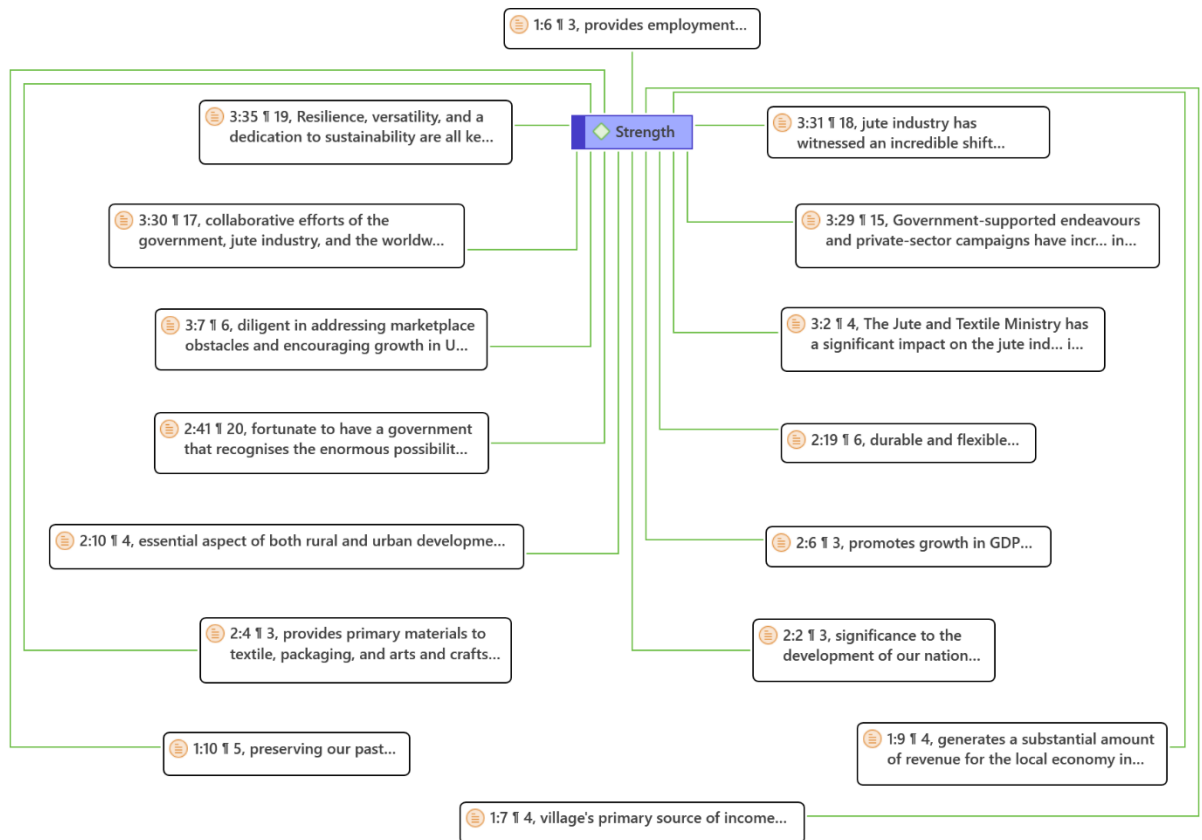


Figure 2. Demographics of the Respondents

Source: Author's Own

### Opportunities

Based on the analysis conducted, it is possible to ascertain the socio-economic impact through an examination of the opportunities within the Jute Industry. These include *promoting environmental preservation and sustainability* that will lead to addressing the environmental concerns, the feasible option of financing through *expansion of micro finance, investment in innovative marketing strategies for building a brand* of Jute products in the market, *expanding, and introducing new export industries* and so on.

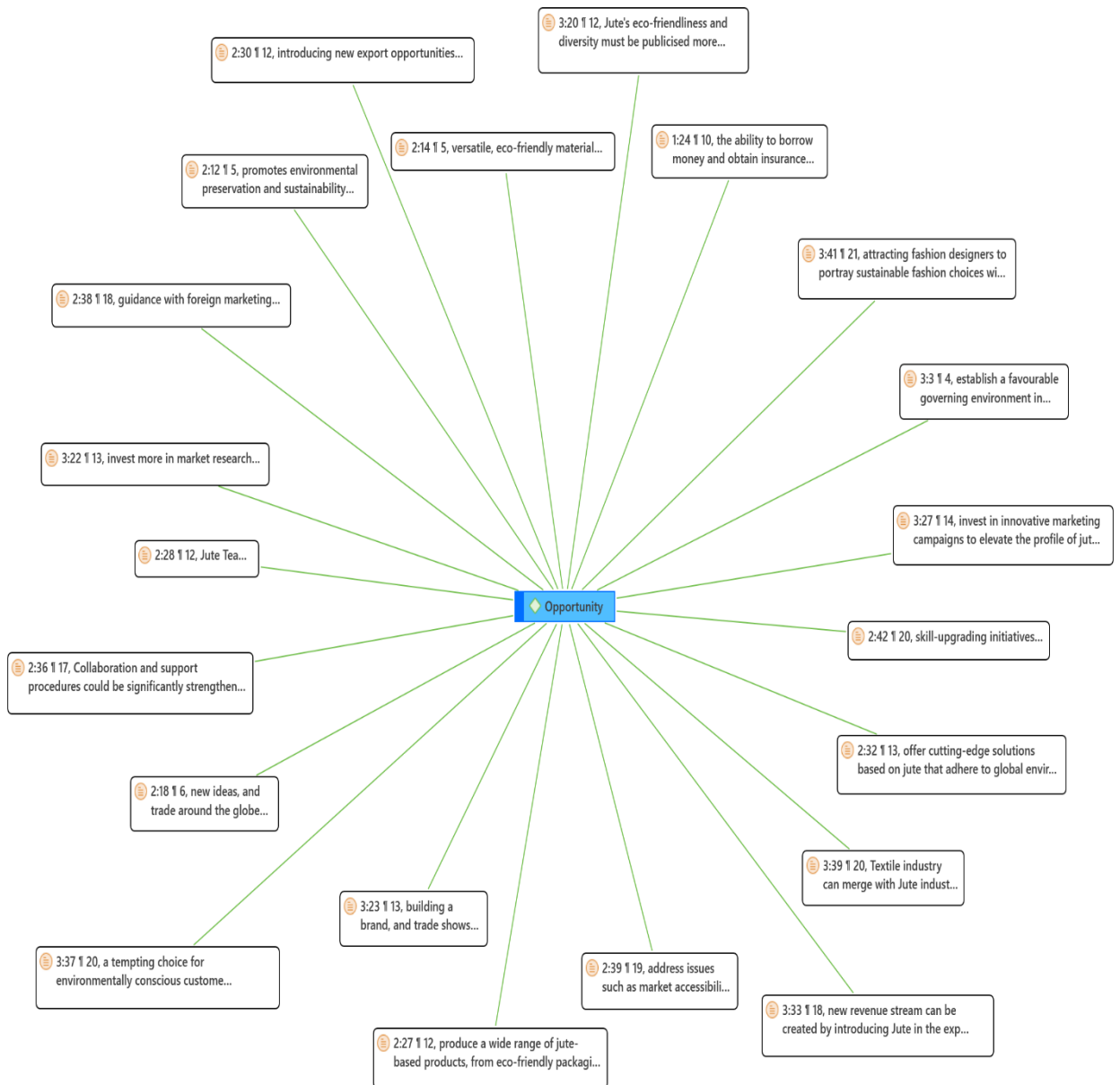


Figure 3. Opportunities  
Source: Author's Own

### Weakness

Negative aspects of socioeconomic influence exist as well and must be addressed. Such as the *regulatory hurdles and obstacles faced in policy implementation* by the policy makers and stakeholders, *lacking adequate storage space for the raw materials*, *insufficient funding for advanced technologies*, *lagging in national and international marketing of Jute products*, *not having good enough jute processing facilities*, *fluctuating raw material prices due to inflation* – all these factors can hinder the socio-economic progress of Jute industry. To progress further, these weaknesses must be turned into the strength of Jute and Jute products.

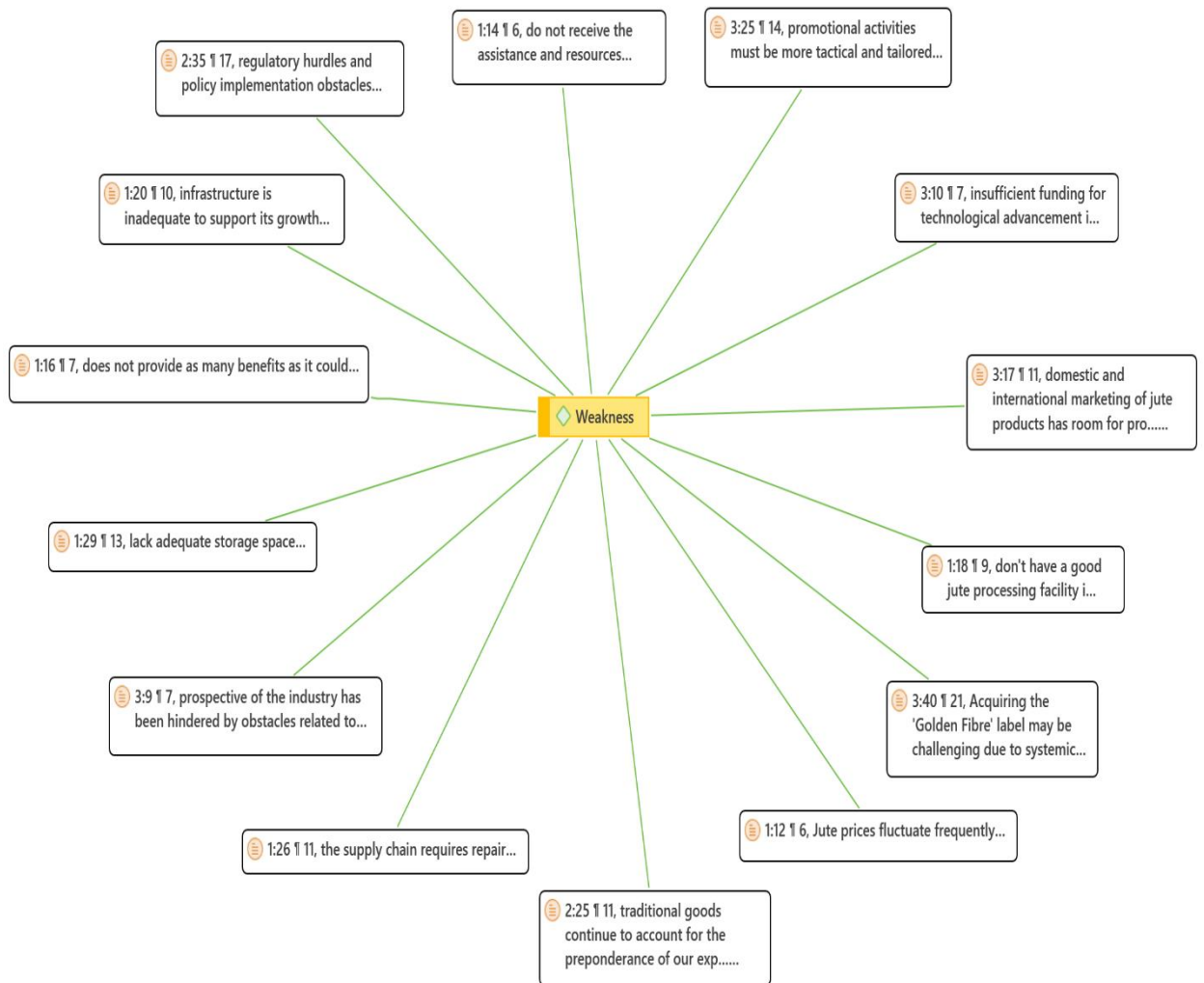


Figure 4. Weakness  
Source: Author's Own

*Threats*

The study reveals impending external concerns that can harm socio-economic development. These include *intense competition from synthetic materials in the textile industry, regulatory and policy implementation hurdles* as well as *improper maintenance of funding for Jute industry*.

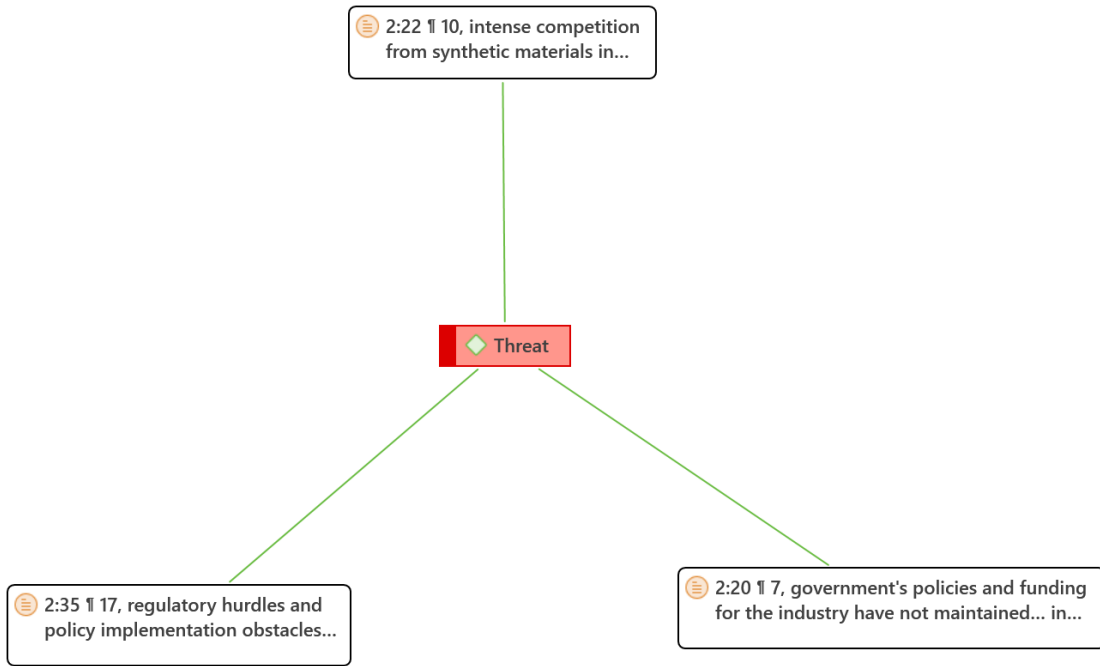


Figure 5. Threats  
 Source: Author's Own

*How might jute and its related products expand Bangladesh's export market, specifically via avenues of product diversification and value addition?*

Jute and its associated products have a significant influence in the socio-economic sphere. To enhance its footprint, it is imperative for the company to explore options for entering the export market through value-added initiatives.

*Product Development*

Value addition can be ensured by the adoption of measures such as *investing more in market research* for understanding the consumers, *initiatives to be taken for skill upgradation* for the workers to develop products, *developing ideas for product in line with the trends* and lastly, *receiving targeted assistance from financial institutions for renovation, funding the R&D process* etc.

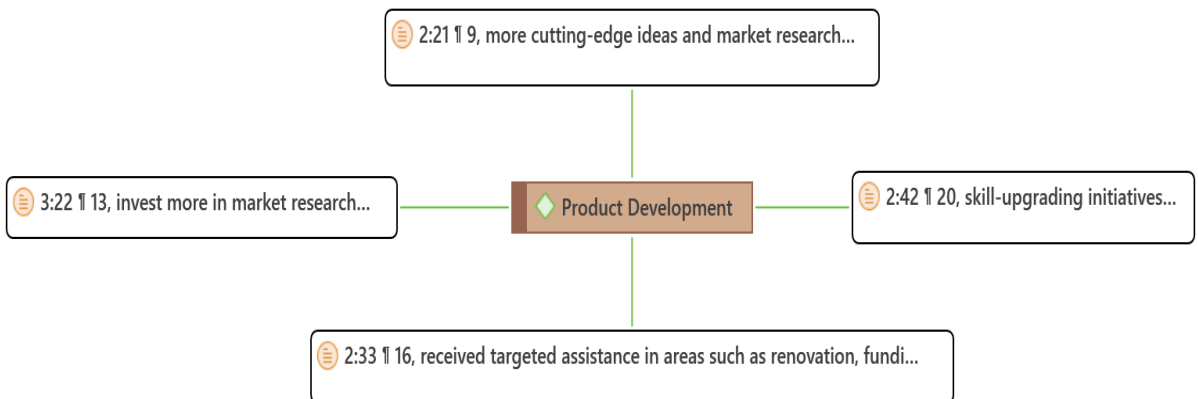


Figure 6. Threats  
 Source: Author's Own

*Product Diversification*

Expanding the export market demands inclusion of diversified line of Jute products for attracting the national and international market. Product diversification is maintained and developed by *branding Jute as a versatile, eco-friendly material, producing wide range of products, introducing Jute tea in the tea market, introducing enhanced promotional activities and innovative marketing campaigns, creation of new revenue streams with Jute products and so on.*

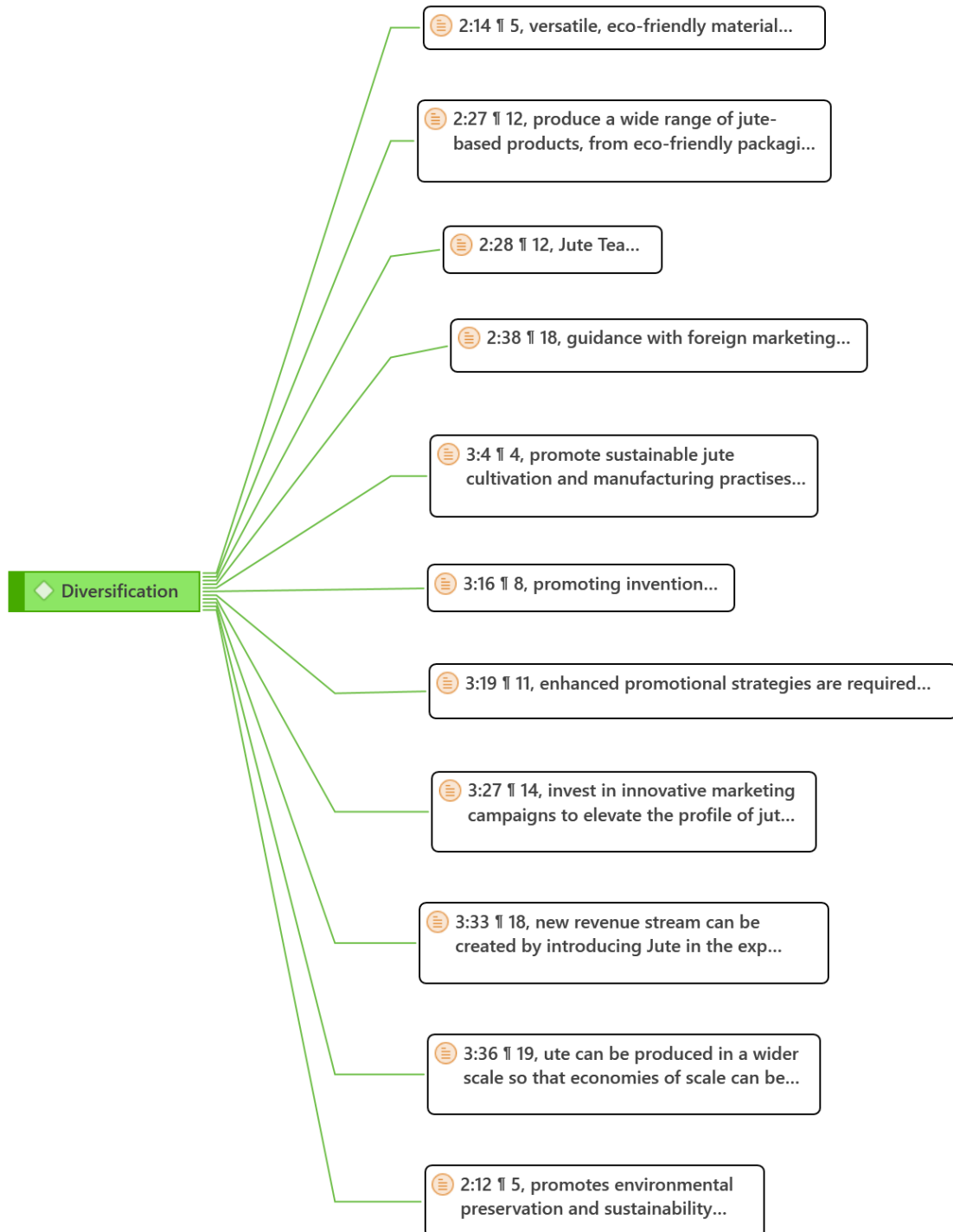


Figure 7. Product Diversification

Source: Author's Own

*Which strategic marketing blueprints stand efficacious in enshrining Bangladesh's eminence as a frontrunner and path-breaker in the jute sector?*

To solidify Bangladesh's position as a pioneer and innovator in the jute industry as well as the export realm in creating value addition, it is imperative that strategic marketing plans adopt a comprehensive approach that encompasses multiple facets of the sector. For this, analysis of *Ansoff matrix*, also known as *Product-Market Expansion Grid* has been implemented which will ensure bringing back the glory of Jute as “The Golden Fibre” of Bangladesh. However, the analysis shows that the implementation of *Market Development* and *Market Penetration* will bring the maximum strategic result in achieving the desired result besides product development and diversification holding significant importance as well.

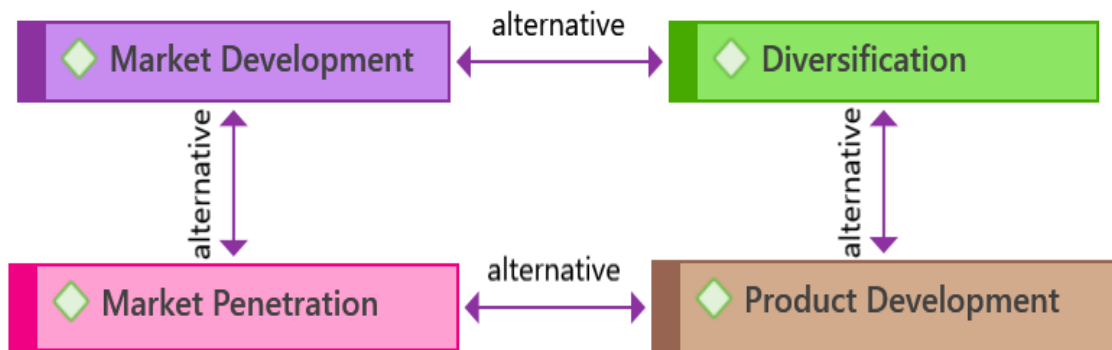


Figure 8. Product Diversification  
Source: Author's Own

#### *Market Development*

Market development strategies involve extending into new markets using existing products. To develop efficiently, the strategies that can be followed are *attracting fashion designers to inspire people in using jute as fashionable and trendy items, portraying jute products as a tempting choice for environmentally conscious consumers, portraying jute products as a brand in the trade shows, addressing market accessibility with the help of Government and Textile industry and so on.*

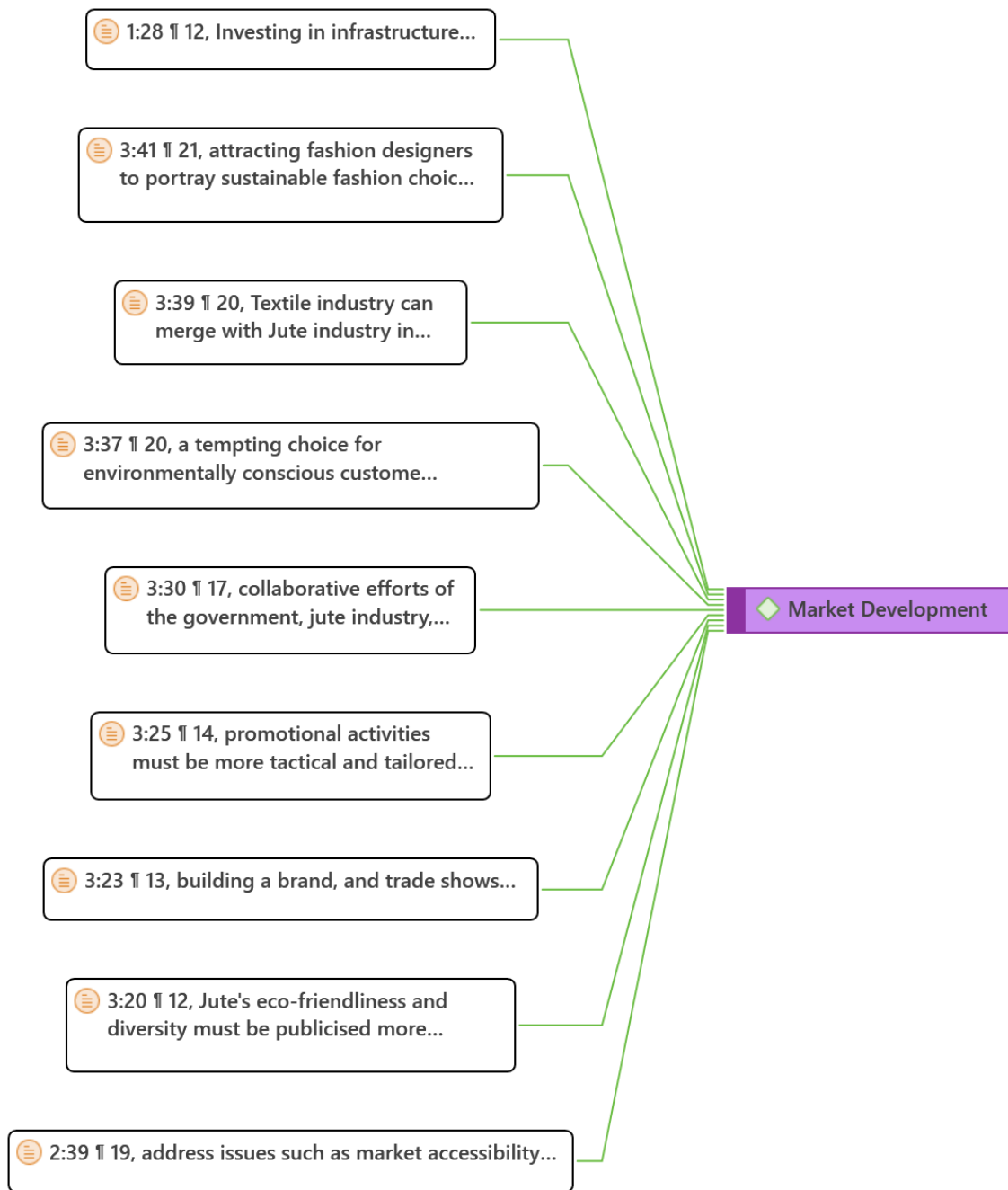


Figure 9. Market Development  
Source: Author's Own

### Market Penetration

As a growth strategy, market penetration entails expanding sales of existing items to existing market groups without making any changes to the product itself. That is, this analysis entails to the utilisation of current jute products in the existing consumer and business market by the limited resources available. The strategies found include providing additional specialised rewards to the industrialists and producers to ensure economies of scale in jute production, repairing the supply chain, upgrading the infrastructure, convenient funding and microfinancing opportunities for the businessmen and producers etc.

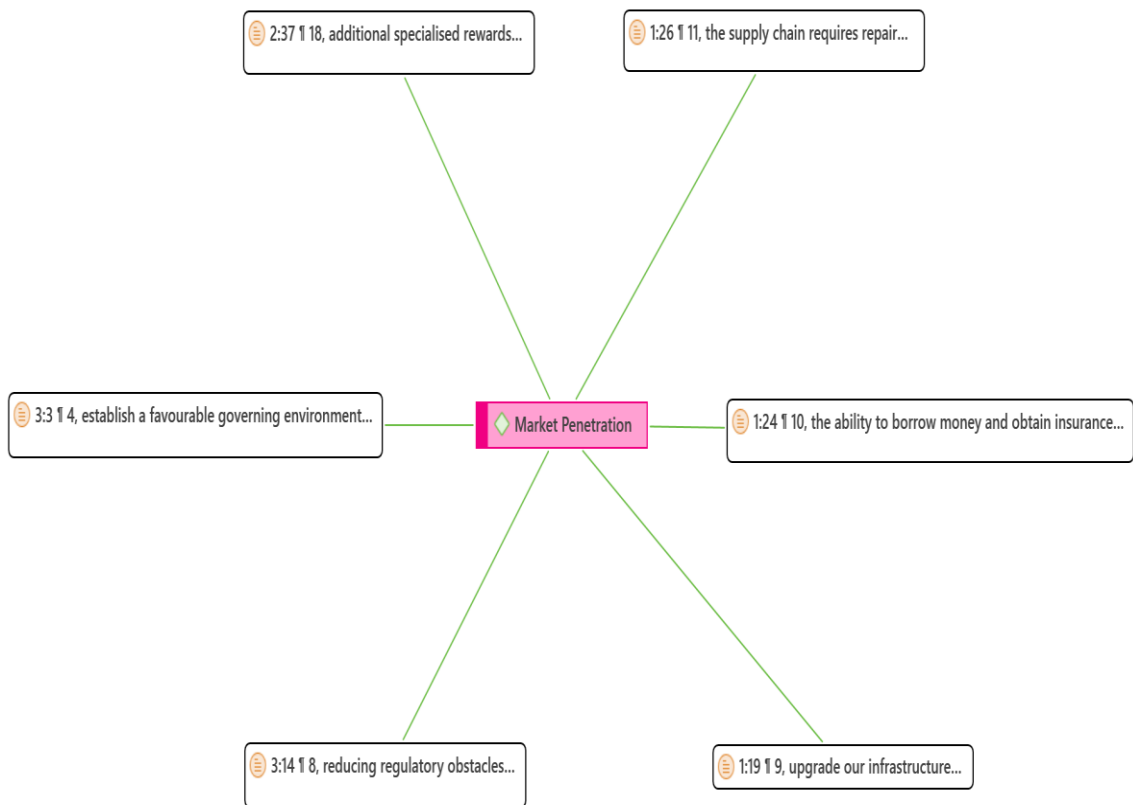


Figure 10. Market Penetration  
 Source: Author's Own

## DISCUSSION

The investigation reveals several consequences, including the categorization of respondents into three tiers, the identification of both external and internal causes, and the formulation of marketing strategies for adoption. The inter relation between all the factors both SWOT analysis and product-market expansion grid with the respondents have been identified which is an important part of the study.

|  | ● Diversification<br>Gr=11 | ● Market Development<br>Gr=12 | ● Market Penetration<br>Gr=11 | ● Opportunity<br>Gr=32 | ● Product Development<br>Gr=7 | ● Strength<br>Gr=18 | ● Threat<br>Gr=3 | ● Weakness<br>Gr=14 |
|--|----------------------------|-------------------------------|-------------------------------|------------------------|-------------------------------|---------------------|------------------|---------------------|
| ● Local level respondents:<br>Farmers and local people<br>Gr=18                | 0                          | 1                             | 4                             | 2                      | 1                             | 5                   | 0                | 7                   |
| ● Mid level respondents: Private mill owners<br>Gr=28                          | 5                          | 4                             | 4                             | 15                     | 5                             | 7                   | 3                | 2                   |
| ● Upper level respondents :<br>Policymakers and external stakeholders<br>Gr=28 | 6                          | 7                             | 3                             | 15                     | 1                             | 6                   | 0                | 5                   |

Figure 11. Investigation Reveals Several Consequences  
 Source: Author's Own

The mid-level respondents and upper-level respondents are equally related to assessing the opportunities pertaining to the jute industry in table given above. In this case, the role of local level respondents seems to be lesser important but cannot be denied completely. In order to implement the *market penetration strategy*, the role of local level respondents along with mid-level respondents is essential.

Analysing the strategies and factors should not be the only goal for the revitalizing the Jute industry. All the factors and stakeholders, not the shareholders only, should be identified and linked for proper value addition to the process. The stakeholder theory, as originally conceptualized by R. Edward Freeman, is clarified upon in his seminal publication titled "**Strategic Management: A Stakeholder Approach**" (Pitman Publishing, Boston, 1984). According to Freeman's perspective, it is contended that a company ought to generate value for all stakeholders who play a crucial role in its sustenance, rather than solely prioritizing the interests of shareholders who are likely to gain financial benefits. The private mill owners are dependent on the policymakers and other outside parties. There is a similar connection between private mill owners and nearby farmers as per the Sankey diagram. For the study's findings to be effectively implemented, respondents at the upper and middle levels need to take the lead in adopting strategies and conducting factor analyses. Restoring Jute's former glories requires concerted effort from all parties involved. For the sake of prosperity of Jute industry, policymakers should craft appropriate regulations endorsing the aforementioned strategies, which private mill owners and local farmers should put into action *in tandem*. Above all, the role of each and every stakeholder must be acknowledged and utilised to turn this study successful in its goal.

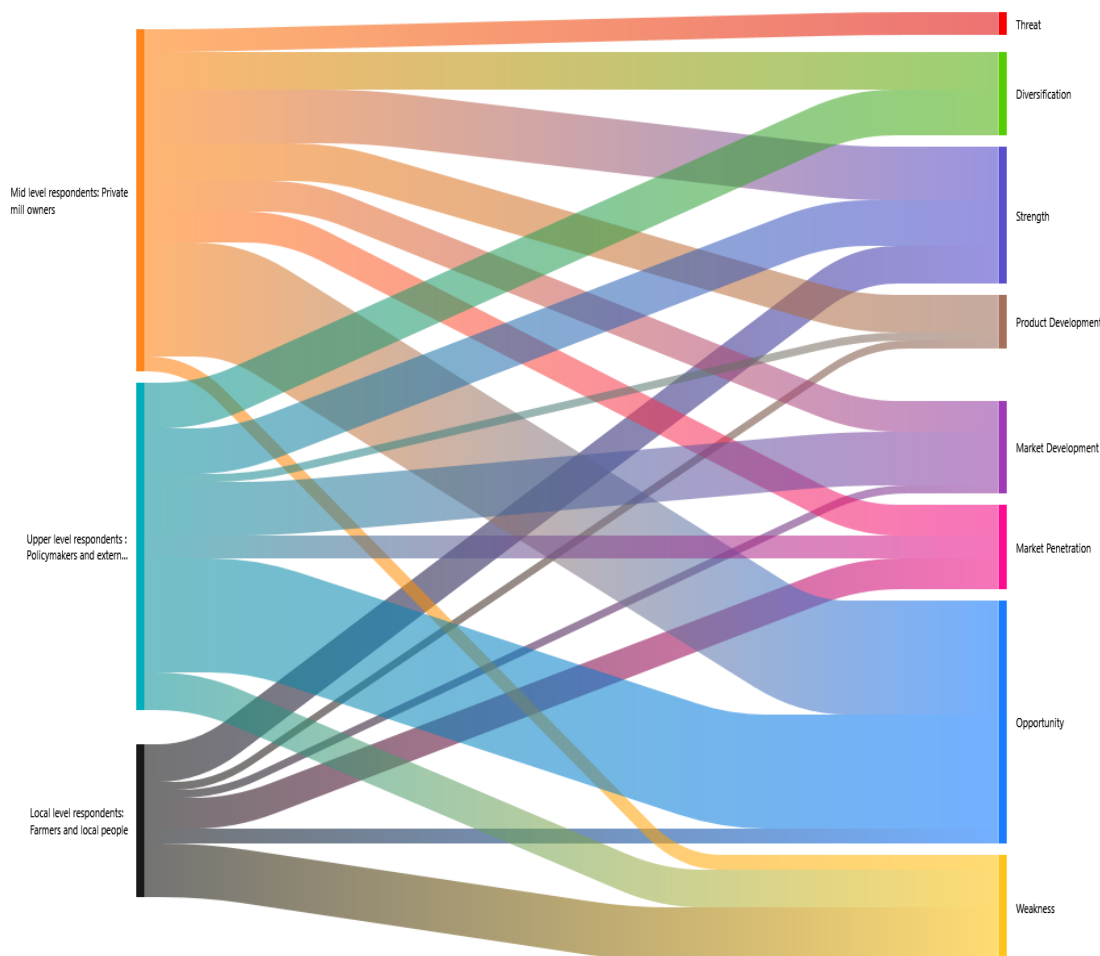


Figure 12. Investigation Reveals Several Consequences  
Source: Author's Own

The study has examined the strengths and weaknesses associated with the Jute business, while also identifying opportunities and risks. Both high-level and mid-level respondents can analyse and plan using SWOT analysis. By outlining the positives and negatives of the "situation" in which the industry operates, a SWOT analysis facilitates the process of strategy development (David,2019). The strengths include *economic development, poverty alleviation* as also stated in other studies (Jahan et al, 2022). Similarly, the weaknesses, threats and opportunities are stated in the findings from the study as discussed in other journals too (Jahan et al, 2019). However, a strong positive relationship can be seen between strength and opportunity, both of which can be utilised to the advantage of growth in Jute industry. On the other hand, a negative relationship can be observed between weakness and threat which must be identified and converted into potential strength with the help of which the previous glory of Jute can be returned to its state.

Behind the revitalisation of the past glory, the role of the marketing strategies is crucial. Known as the father of strategic management, Russian-American mathematician and business manager **H. Igor Ansoff** invented and

published *the Ansoff Matrix* which inspired marketers and business leaders to assess growth prospects and hazards (Zugay, 2023). Companies who want to grow their market share and sell more to the current markets are using a market penetration approach. This study suggests *repairing and upgrading infrastructure and supply chain* as **market penetration** approach (Steinberg et al, 2023). Creating new and better products for markets that already exist is the main goal of a **product development** strategy (Cooper, 2019). From the analysis, *more trendy product design* has been found as an approach. Companies that use a **market development** strategy bring their current products into new markets (Islam, 2019). The study suggests *expanding the Jute market into the Fashion industry* as an alternative. A **diversification** strategy encourages introducing new goods and/or services into untapped markets. Such as *introducing Jute tea* in the market (Niloy et al, 2019). It has also been observed that the adoption of strategies can be **accelerated** by analysing strength and opportunity, whereas, weakness and threat can put the strategies at **risk**.

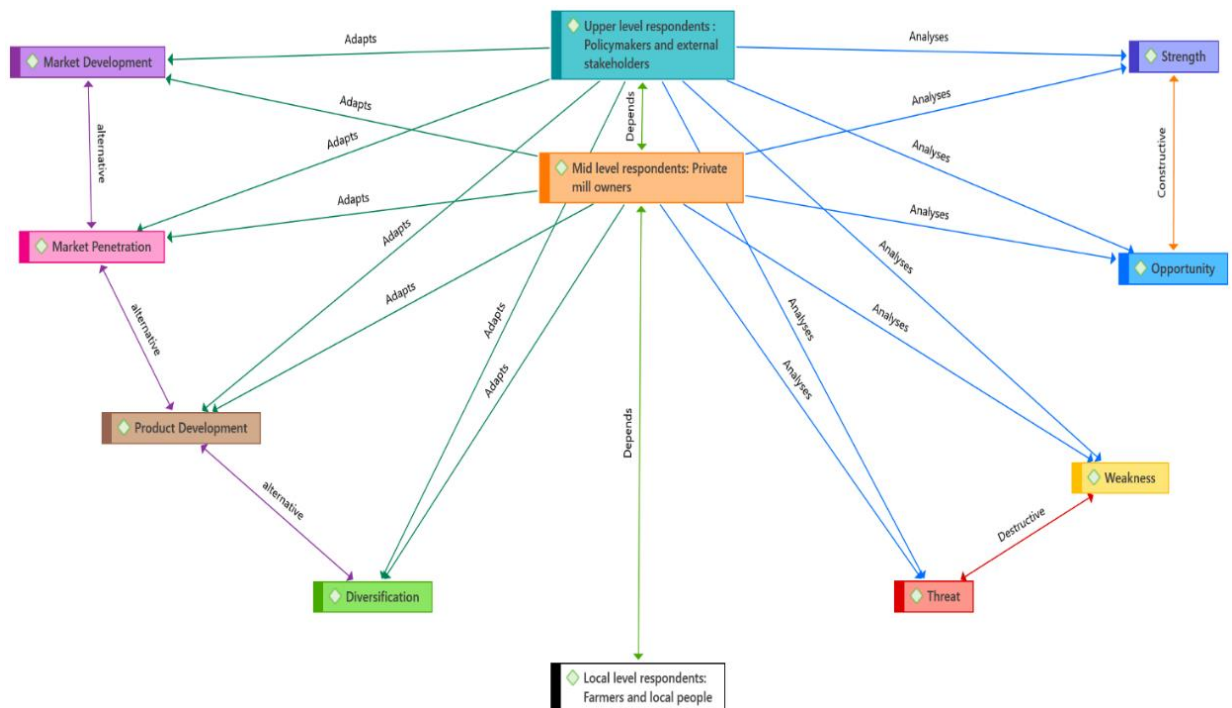


Figure 13. Strength and Opportunity  
Source: Author's Own

## CONCLUSION AND RECOMMENDATION

This study examines the complex dynamics of the jute industry in Bangladesh, aiming to clarify its socio-economic implications and explore possibilities for rejuvenation. The findings highlight the historical significance of the industry, emphasizing its role as a crucial source of livelihood for various stakeholders. Additionally, the findings shed light on the challenges and opportunities that the industry currently faces. This study is being conducted

considering a notable gap in the current body of literature work, specifically in relation to marketing perspectives within the jute industry. The limited availability of comprehensive marketing studies presents a significant obstacle when it comes to devising focused strategies for revitalizing the industry. Moreover, this study is completely qualitative which leaves a gap for not being able to quantify the perception of the related stakeholders' opinions. Hence, it is crucial for forthcoming research endeavours to address this gap by delving into the intricate intersections of marketing strategies, economic opportunities, and socio-cultural dimensions within the jute sector.

The outcomes of this study underscore the importance of fostering collaborative endeavours among various industry stakeholders, policymakers, and researchers in order to effectively establish a resilient marketing framework. The proposed framework should encompass a comprehensive analysis of product diversification strategies, the implementation of sustainable practices, and the development of a strategic approach to global market penetration. Furthermore, it is imperative to emphasize the necessity for heightened financial allocation towards research endeavours centred on the intricate marketing dynamics of the jute industry. This emphasis is crucial to foster an in-depth understanding of the subject matter, which in turn can facilitate well-informed decision-making processes and the development of effective policies. By implementing these suggestions, Bangladesh can fully exploit the immense potential of its jute industry. This would not only result in significant economic growth and prosperity but also position the country as a sustainable and highly competitive participant in the constantly changing global market.

## REFERENCES

- Akter, S., Sadekin, M.N. and Islam, N., 2020. Jute and jute products of Bangladesh: contributions and challenges. *Asian Business Review*, 10(3), pp.143-152.
- Chakrabarty, A., Mansoor, N., Uddin, M.I., Al-Adaileh, M.H., Alsharif, N. and Alsaade, F.W., 2021. Prediction approaches for smart cultivation: a comparative study. *Complexity*, 2021, pp.1-16.
- Cooper, R.G., 2019. The drivers of success in new-product development. *Industrial marketing management*, 76, pp.36-47.
- David, F.R., Creek, S.A. and David, F.R., 2019. What is the key to effective SWOT analysis, including AQCD factors. *SAM Advanced Management Journal*, 84(1), pp.25-32.
- Dubey, A., Chauhan, V.K., Pandey, R., Dubey, M.M. and Debnath, S., 2020. Golden fiber jute: A treasurable sustainable material. *Recycling from Waste in Fashion and Textiles: A Sustainable and Circular Economic Approach*, pp.341-362.

- Islam, M.M. & Ali, M.S., 2017. Economic importance of jute in Bangladesh: production, research achievements and diversification. *International Journal of Economic Theory and Application*, 4(6), pp.45-57.
- Islam, M.M., 2019. Exploring silent negligence of jute-The golden fiber of Bangladesh: A historical perspective. *Journal of Economics and Business*, 2(3).
- Islam, M.S., Sajib, A.A. & Khan, H., 2022. Jute Genome Sequencing: A Bangladeshi Initiative. In *The Jute Genome* (pp. 167-183). Cham: Springer International Publishing.
- Islam, T. & Hussain, M., 2022. How consumer uncertainty intervene country of origin image and consumer purchase intention? The moderating role of brand image. *International Journal of Emerging Markets*, (ahead-of-print).
- Jahan, A., 2019. The environmental and economic prospects of jute with a connection to social factors for achieving Sustainable Development.
- Jahan, M.S., Hossain, S. and Khan, M.A., 2022. Economic importance of jute. In *The jute genome* (pp. 1-16). Cham: Springer International Publishing.
- Kamarudin, S.H., Mohd Basri, M.S., Rayung, M., Abu, F., Ahmad, S.B., Norizan, M.N., Osman, S., Sarifuddin, N., Desa, M.S.Z.M., Abdullah, U.H. & Mohamed Amin Tawakkal, I.S., 2022. A review on natural fiber reinforced polymer composites (NFRPC) for sustainable industrial applications. *Polymers*, 14(17), p.3698.
- Mim, A.A., 2021. Strategic Marketing Plan for Arnu Jute Mills Limited.
- Mozid, A., 2020. A study on Bangladesh Jute Industry and Transocean Fibers Processors Limited.
- Niloy, A.C., 2021. Jute: Solution to Global Challenges and Opportunities of Bangladesh. *SEISENSE Business Review*, 1(2), pp.59-75.
- Rahman, T., Ahmed, Z. and Sarkar, S., 2022. Analysis of the antibacterial properties of jute leaf. *Open Access Research Journal of Life Sciences*, 4(1), pp.51-55.
- Saikia, B., Dey, S. and Bhattacharjee, P., 2020. GREEN MARKETING OF JUTE PRODUCTS-A STUDY ON ASSAM CO-OPERATIVE JUTE MILLS LTD, SILGHAT. *International Journal of Management (IJM)*, 11(2), pp.296-304.
- Sayeed, M.A., Muhammad Sayem, A. and Haider, J., 2019. Opportunities with renewable jute fibre composites to reduce eco-impact of non-renewable polymers.
- Shahinur, S., Sayeed, M.A., Hasan, M., Sayem, A.S.M., Haider, J. and Ura, S., 2022. Current development and future perspective on natural jute fibers and their biocomposites. *Polymers*, 14(7), p.1445.
- Steinberg, J.B., 2023. Export market penetration dynamics. *Journal of International Economics*, 145, p.103807.
- Zugay, B. and Zakaria, R., 2023. Ansoff Matrix.